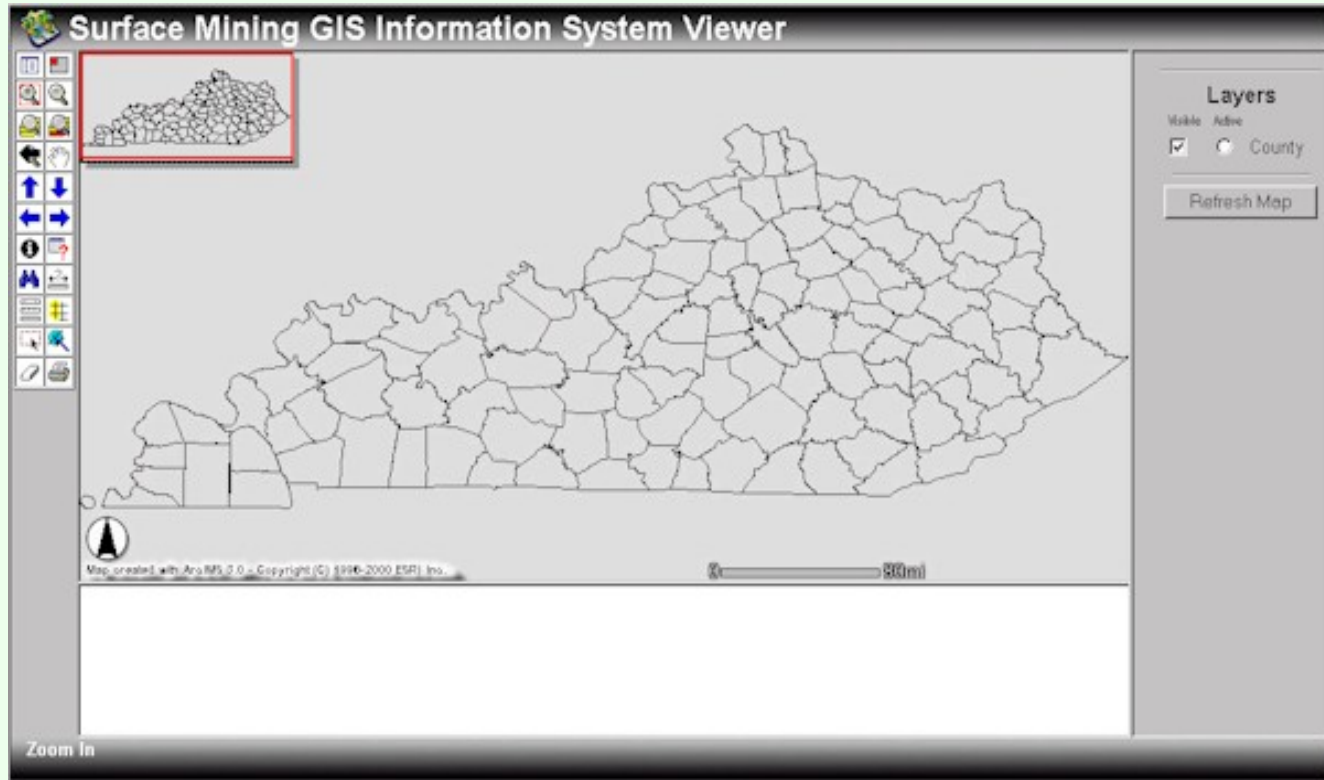


Kentucky Surface Mining GIS Viewer Tutorial

The Surface Mining Internet Viewer has been developed to allow the public to view maps of surface mining in Kentucky. This page will assist you in understanding the different functions of the viewer by displaying a short description of each button and how to use them.



The layers of data you will be able to view while using this application include:

- Information about active and inactive surface mine permits
- County boundaries
- Cities
- Roads
- DRG's (Digital Raster Graphics) which is a digital topographic map.

The functions you will be able to perform using the viewer include:

- Zooming in to an area and displaying information about a specific surface mine permit
- Database searches by a category or key word
- Measuring distances
- Creating a buffer zone around a feature

Getting Started

Begin by opening up the [viewer](#) (The application might take a few moments to load to your computer). The viewer will display an image of Kentucky with the county boundaries outlined. On the left side you can see the button menu and on the right side there is an area for your data layers/legend. An area at the bottom is reserved for when you query, buffer, measure etc. All of the


available layers will not be visible when you first open the viewer. The other data layers will become visible the more you zoom in.

The Menu



When you select a menu option, the button is highlighted with a red box so you know which option is active. The viewer

makes the "Zoom In" button active when first opened.

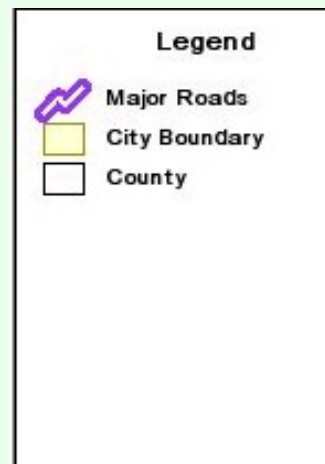
The toggle button  switches the far right window between the "Layer view" and the "Legend view".




The Layer view displays which layers are available at the scale you are zoomed in to. There are 2 options you can check for each layer. By checking "Visible", the layer will be displayed inside the view. By selecting "Active", you will be able to select, query, search and identify features of this layer. Only one layer can be active at any one time.



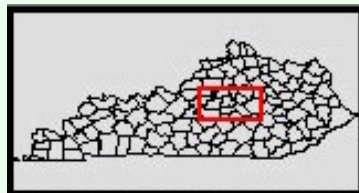
The Refresh Map button is used to show changes if you select or unselect the Visible option.




The Legend view displays each layer that is visible and what graphic is used to define it much like you would see on a paper map.


The Overview button  simply turns on or off the overview area of the map which displays the area you are currently zoomed in to.

Overview Area





The Zoom buttons allow you to zoom in or out by either clicking in the view area or dragging the + cursor to create a boxed area that will determine the extent of the new view.


Use the Full Extent button  to take you back to the original view of the state with county boundaries displayed.


Use the "Zoom to Active Layer" button  to zoom in to the extent of all features contained within that layer.



The "Last Extent" button  takes you back to the last view that you were zoomed in to.

The "Pan" button  allows you to take the cursor, click on the view and while still holding the mouse button down, drag the view in any direction to obtain a new view of the desired area.

The "Identify" button  allows you to call up the attributes of a particular feature. In the Layer view on the right side of the screen you need to select which layer you want to be active before using the Identify tool. It will only return attributes for the active layer. The attributes will be displayed on the bottom of the view area. If the feature you want attributes of aren't listed in the Layer view, you will have to zoom in until it is displayed before you can identify it.

The "Query" button  allows you to select features based on a filter of selected fields of that feature. Hit the Query button to call up the query bar (see below). In the field area, there is a pulldown menu that you should use to select the field of interest. Then you must choose an operator such as =, >, or LIKE to define a specific value of the field. In the value box, you should type the value of what you're searching for based on the field. You can hit the "Get Samples" button to see a sampling of what you should type in this field. If the value you're searching for is listed you can just click on that value. Once you have these 3 fields complete then hit the "Add to Query String" button and hit the "Execute" button. This will perform the query and return the results as well as zoom into the area of interest which highlights the query results.

Field	Operator	Value	And	Or
KFI_SDE.COUNTY_POLYGON.OBJECTID	=		Not	(
		Get Samples)	
Add to Query String				
Execute		Undo	Clear	



The "Find" button allows you to search for a text string in the "active" layer. This search is case sensitive so to search for a particular city you need to capitalize the first letter.

Find

Search is Case-Sensitive

Enter String to Find in County :



The "Measure" button allows you to click on 2 or more points and return the distance in the current units (see "Set Units" button).

It keeps track of the length of the segment as well as a running total if you need to obtain the length of a route between multiple points. The readout is at the top of the view screen.

Surface Mining GIS Information System Viewer

The "Set Units" button allows you to set your map units in Degrees, Feet, or Meters, and your display units in Feet, Miles, Meters, or Kilometers.


Set Units

Map Units

DEGREES ▼

Display Units

MILES ▼


The "Buffer" button  is used to create a zone around a specific feature at a designated distance out from the feature. You can also highlight another feature that falls within that buffer zone. The checkbox beside the "Create Buffer" button will display back the attributes of the feature highlighted, if any. A feature(s) has to be selected before a buffer can be performed.


Buffer

Highlight features from County within a distance of 0 MILES around the selected features of County

☐ Display Attributes





The "Select Area" button  allows you to drag a box with the cursor to define an area of selection. Any "active" feature that touches or falls within the box will be selected. The selected set will be highlighted in yellow. Once features are selected, you can perform other functions on this selected set such as Buffer.

The "Select by Line/Polygon" button  allows you to create a line route upon which all "Active" features the line crosses will be selected or to create a polygon upon which all features touching or contained within that polygon area will be selected. To create a line, click on one or more points in the view and then hit the "Complete Line & Select" button and the selected set will be highlighted and its attributes will be displayed in the lower window. To create a polygon, click on the view in selected points until your desired area is defined then hit the "Complete Polygon & Select" button to highlight the selected set as well as display the attributes.

If you mistakenly hit a point you don't want, just hit the "Delete Last Point" button to take it off.

Select with Line or Polygon

The "Clear Select" button  will clear any selected features or remove any added graphics such as lines or polygons used with the Line?Polygon tool.

The "Printer" button  sends your image to your selected printer.



[Natural Resources Cabinet](#)